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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,760	02/10/2004	Sandeep Bhatia	14328US02	3474
23446 7590 05/15/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER NGUYEN, THAN VINH	
			ART UNIT 2187	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/776,760

Applicant(s)

BHATIA, SANDEEP

Examiner

Than Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is a response to the amendment, filed 2/26/07.
2. Claim 8 has been canceled. Claims 1-7,9-14 remain pending.

Response to Amendment/Arguments

3. Applicant has amended the independent claim to include other limitations. The added limitations changed the scope of the previous claims and were not considered previously.
4. Applicant's arguments with respect to claims 1-7,9-14 have been considered but not persuasive. The scope of the amended claims is different from the previous claims. The new limitations are addressed below.
5. It should be noted that Applicant failed to address the previous objection to the specification and oath/declaration and rejection to claims 3 and 11 under 35 USC 112. Applicant did not provide any response to the above objection and rejections. To further prosecution, this Office Action will be made final.

Specification

6. The disclosure is objected to because of the following informalities: Applicant should remove the unnecessary paragraphs and headings (paragraphs 2-3), on page 1 of the specification. These paragraphs provide no additional information for the invention and are not required.

Appropriate correction is required.

Oath/Declaration

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7. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
9. Claims 3,11 recite the limitation "the address decode logic" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.
10. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 7-8 are currently dependent upon claim 5. It appears that these claims should be dependent upon claim 6 (a method claim), instead of claim 5 (an apparatus claim).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 1-7,9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kranich (US 5,761,443) in view of Kim (US 6,750,781).

As to claim 1,4,6,9,12:

12. Kranich teaches the claimed processor subsystem, and its method of operation, for transacting data, the processor subsystem comprising: a processor (master device; 104/112; Fig. 1), a memory for storing data (master or slave devices 104,406,112,114; Fig. 1; 1/58-2/22; 3/30-53), the memory mapped to a first address space associated with data values with a first length and a second address space associated with data values with a second length (each have different sized bus width; 1/58-2/22; 3/30-53); and a bridge (bus conversion bridge 108; Fig. 1) for performing one transaction after receiving a transaction with an address corresponding to the first address space and for performing two or more transactions after receiving a transaction with the address corresponding to the second address space (adapting access of devices with different bus/word width; 1/58-2/22;3/30-53). Kranich teaches determining whether the address corresponds to the first address space or the second address space by examining a particular bit (detect size using byte enable bits; 5/5-27). Kranich does not specifically teach the examined bit being an address bit. It is known in the art to incorporate other information bits into the address bits for simplicity. Kim teaches incorporating parity check bits into the address bits (4/38-45). Thus, it would have been obvious to one of ordinary skills in the art at the time of the invention to use Kim's teaching to incorporate the byte enable bits of Kranich into the address bits to simplify the addressing scheme.

As to claim 2,10:

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13. Kranich teaches wherein the bridge further comprises: address control logic for causing the bridge to perform one transaction after receiving a transaction with an address corresponding to the first address space and perform two or more transactions after receiving a transaction with the address corresponding to the second address space (16-bit access requires 1 transaction while 32-bit access are split into 2 transactions; 1/58-2/22; 3/54-4/4; 6/25-60).

As to claim 3,7,11:

14. Kranich teaches the address decode logic comprises: a first logic circuit for decoding the address (decoder 402,404); and a second logic circuit for determining if address corresponds to the first address space or the second address space (determine if access is toward different space (different bus); 6/25-60).

As to claim 5,13:

15. Kranich teaches the first length is 16 bits and the second length is 32 bits (1/59-2/22, 3/54-4/4).

As to claim 14:

16. Kranich teaches a bus for transmitting the transaction from the processor to the processor subsystem (PCI bus 102; Fig. 1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Than Nguyen
Primary Examiner
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